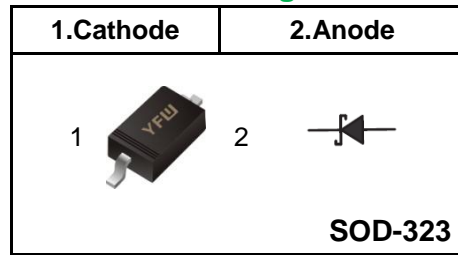


Schottky Barrier Diode

Pinning



Features

- ◆ Low Forward Voltage Drop.
- ◆ Guard Ring Construction For Transient Protection.
- ◆ Negligible Reverse Recovery Time.
- ◆ Low Reverse Capacitance.

Marking Code

SD101AWS	S1
SD101BWS	S2
SD101CWS	S3

Applications

- ◆ Schottky barrier switching.

Maximum Rating @ Ta=25°C unless otherwise specified

Parameter	Symbol	SD101AWS	SD101BWS	SD101CWS	Unit
Peak Repetitive reverse voltage	V_{RRM}				
Working Peak reverse voltage	V_{RWM}	60	50	40	V
DC Reverse Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current	I_F	15			mA
Repetitive Peak Forward Current @t<1.0s @t=10µs	I_{FRM}	50			mA
		2.0			A
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			°C/W
Storage temperature	T_{stg}	-65 to+125			°C

Electrical Characteristics @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD101AWS SD101BWS SD101CWS	$V_{(BR)R}$	60 50 40		V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
Forward voltage	SD101AWS SD101BWS SD101CWS SD101AWS SD101BWS SD101CWS	V_F		0.41 0.40 0.39 1.00 0.95 0.90	V	$I_F=1.0mA$ $I_F=1.0mA$ $I_F=1.0mA$ $I_F=15mA$ $I_F=15mA$ $I_F=15mA$
Reverse current	SD101AWS SD101BWS SD101CWS	I_{RM}		0.2	μA	$V_R=50V$ $V_R=40V$ $V_R=30V$
Capacitance between terminals	SD101AWS SD101BWS SD101CWS	C_T		2.0 2.1 2.2	pF	$V_R=0, f=1MHz$
Reverse Recovery Time		t_{rr}		1.0	ns	$I_R=I_F=5mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

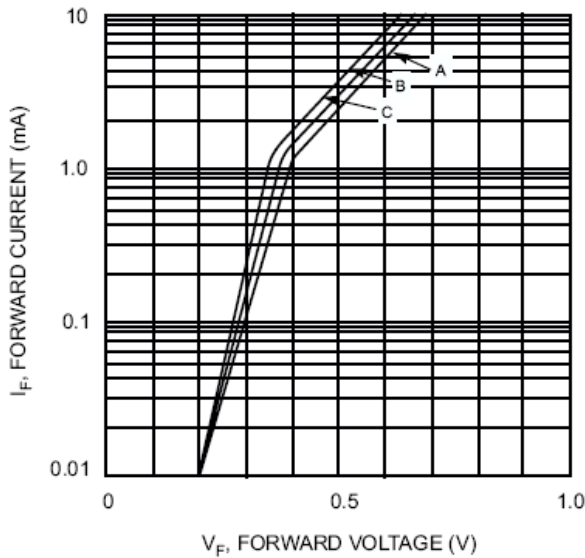


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

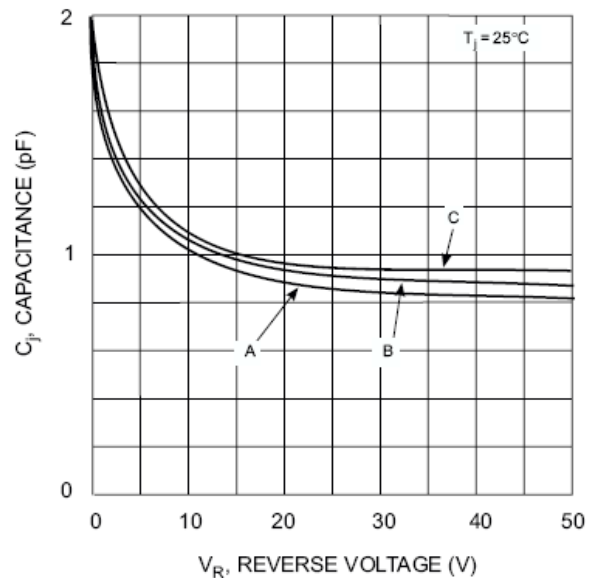


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

Ordering information

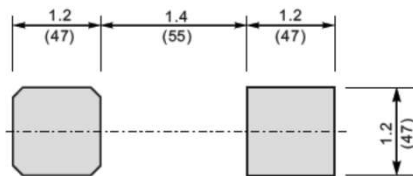
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$

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